

REMARKS/ARGUMENTS

Upon entry of this amendment, claims 1-24 are pending. Claims 1, 3, 6, 13, 14, 17, 23, and 24 have been amended. Support for the amended claims can be found in the specification. No new matter has been added. Reconsideration is respectfully requested.

Interview Summary

Applicants would like to thank the Examiner for the interview conducted on June 6, 2007, between the Examiner and Applicants' attorney Lu Yin. During the Interview, the Examiner clarified the rejections and explained the applicability of the cited references. More specifically, the discussion focused on claims 1 and 14. Applicants' attorney pointed out the differences between the claims and the cited references.

Claim Objections

Applicants respectfully submit that the objection for claim 23 is overcome in light of the amendment.

Claim Rejections under 35 U.S.C. §112

Claims 6 and 17 were rejected for allegedly lacking antecedent basis. Applicants respectfully submit that these rejections for claims 6 and 17 are now overcome in light of the amendment.

Claim Rejections under 35 U.S.C. §102

Claims 1, 2, 4, 8-13, and 24 were rejected for allegedly being anticipated by Chow (U.S. Patent Application No. 20020126672). Applicants respectfully disagree and traverse all these rejections.

Claim 1

Claim 1 recites the following:

"Apparatus for security applications, the apparatus comprising:
a plurality of interfaces, the plurality of interfaces including a first interface coupled to a storage network, the first interface being adapted to receive a frame from the storage area network;
a tracking component being configured to provide a statistics based on data flows associated with the plurality of interfaces;
a classifier coupled to at least the first interface, the classifier being adapted to determine an information type associated with the frame, the type being an including at least initiator, data, and or terminator, the classifier being adapted to determine header information associated with the frame;
an encryption/decryption processor coupled the security action processor, the encryption/decryption processing being adapted to perform encryption/decryption based on the statistics and the type; and
a content addressable memory coupled to the classifier."

In contrast, Chow merely discloses an apparatus for packet classification:

"The present invention provides for a reconfigurable packet classifier using CAM. The invention is directed to packet classification for switching/routing systems where the router's system resources are limited and the customer requirements from the router are variable. The invention addresses the CAM constraint (e.g. search key width) problems of CAM-based classification systems, by allowing a reconfigurable selection of packet fields and/or payload bits to be used in the definition of the search key. For any given incoming packet, a subset of that incoming packet may be statically chosen to fit that particular CAM architecture and to create a particular CAM search key. This provides router deployment flexibility within networks and, thus, cuts costs." (See Abstract)

Chow does not disclose "a tracking component being configured to provide a statistics based on data flows associated with the plurality of interfaces." Chow also fails to disclose "an encryption/decryption processor coupled the security action processor, the encryption/decryption processing being adapted to perform encryption/decryption based on the statistics and the type."

The apparatus as disclosed by Chow, according to the Examiner, includes an interface, a classifier, and a content addressable memory, which anticipate features of claim 1. Applicants disagree.

Among other things, the classifier in Chow (Figure 2, element 208) is different from the classifier of the present invention. According to Chow:

"[0040] Referring back to FIG. 2, after the user has defined or provided the classification criteria or selection criteria using the router configuration engine 204, the user selection criteria information is then used by the reconfigurable buffet selector/parser 210 to extract bits from the incoming packet information 208 and to also generate the search key 214, which is then used for the lookup into the CAM's classification database 216." (See page 4)

The classifier 208 in Chow is not, among other things, "adapted to determine an information type associated with the frame, the type being an including at least initiator, data, and or terminator".

Therefore, at least for the above reasons, claim 1 should be allowed.

Claims 2, 4, 8-13, and 24

Claims 2, 4, 8-13, and 24 should be allowed for substantially the same reasons as claim 1, but more specifically for the feature they recite.

Claim Rejections under 35 U.S.C. 103(e)

Claims 3, 5-7, and 14-23 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Chow, and further in view of Amara (U.S. Patent No. 6,674,743). Applicants respectfully traverse all these rejections.

Claims 3 and 5-7

Applicants respectfully submit Chow fails to disclose all of the features of claim 3 and 5-7 for the reasons stated above. In addition, the defect in Chow is not cured by Amara. Amara appears to be related to policy-based service for internal applications, Amara does not disclose "an encryption/decryption processor coupled the security action processor, the

encryption/decryption processing being adapted to perform encryption/decryption based on the statistics and the type"

In addition, the combination of Chow and Arama fails to disclose at least the above claim limitation.

Therefore, at least for these reasons, claims 3 and 5-7 should be allowed.

Claim 14

Claim 14 recites the following:

"Apparatus for security applications of storage area networks, the apparatus comprising:

an interface coupled to a storage network, the interface being adapted to receive a frame from a first source of a plurality of sources in the storage network;

a tracking component being configured to provide a statistics based on data flows associated with the plurality of sources;

a classifier coupled to the interface, the classifier being adapted to determine an information type associated with the frame, the type being an initiator, data, or terminator, the classifier being adapted to determine header information associated with the frame; and

a content addressable memory coupled to the classifier, the content addressable memory comprises a rule portion and a flow portion, the rule portion being adapted to determine header information and command information from the initiator frame and the flow portion being adapted to provide a flow based upon the header information;

a central processing unit coupled to the classifier;

an action processor coupled to the central processing unit;

a security action processor SAP processor coupled to the central processing unit, the SAP being adapted to process data block by block; and

an encryption/decryption processor coupled the security action processor, the encryption/decryption processor being adapted to encrypt/decrypt the data block by block based on at least the statistics."

As the Examiner conceded (see Page 8 of the Office Action mailed March 30, 2007), Chow does not teach an encryption/decryption processor. The Examiner asserted that Amara teaches this claim limitation. Applicants respectfully disagree.

Arama, as explained above, relates in general to policy-based services for internal application. Arama, in relevant sections, discloses the following:

"Policy engine 126 applies a policy to the internal packets. Specifically, policy engine 126 examines one or more selector fields present in the internal packets. Typical selector fields include the source address, destination address, source port, destination port, and protocol type. Policy engine 126 also applies a set of rules specifying the manner in which a given packet should be handled if the selector fields of the given packet match certain predefined criteria. Such handling can include without limitation dropping the packet, logging the packet, encrypting or decrypting the packet, performing network address translation and/or port address translation on the packet, and prioritizing the packet for QoS. Policy engine 126 may apply a policy to internally-generated packets that differs from the policy apply to the internally-destined packets. However, policy engine 126 typically applies the same policy to internally-destined and internally-generated packets." (See column 5, lines 9 to 25).

While Arama appears to disclose encryption based on policies, Arama fails to disclose "an encryption/decryption processor coupled the security action processor, the encryption/decryption processor being adapted to encrypt/decrypt the data block by block based on at least the statistics". In addition, the combination of Chow and Arama does not disclose this claim limitation.

Therefore, at least for the above reasons, claim 14 should be allowed.

Claims 15-23

Claims 15-23 should be allowed for substantially the same reasons as claim 14, and more specifically for the features they recite.

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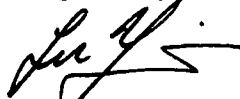
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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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